

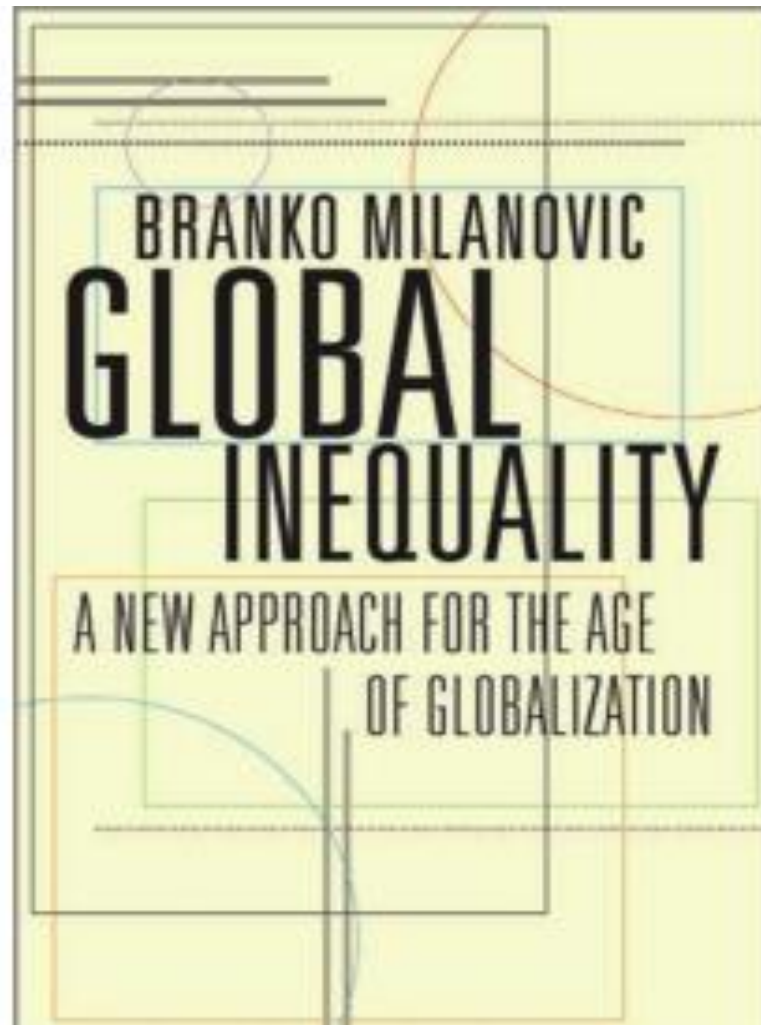
Inequality in the age of globalization

Annual Research Conference
Brussels, 20 November 2017

Lecture in Honor of Anthony A. Atkinson

Branko Milanovic

Largely based on:

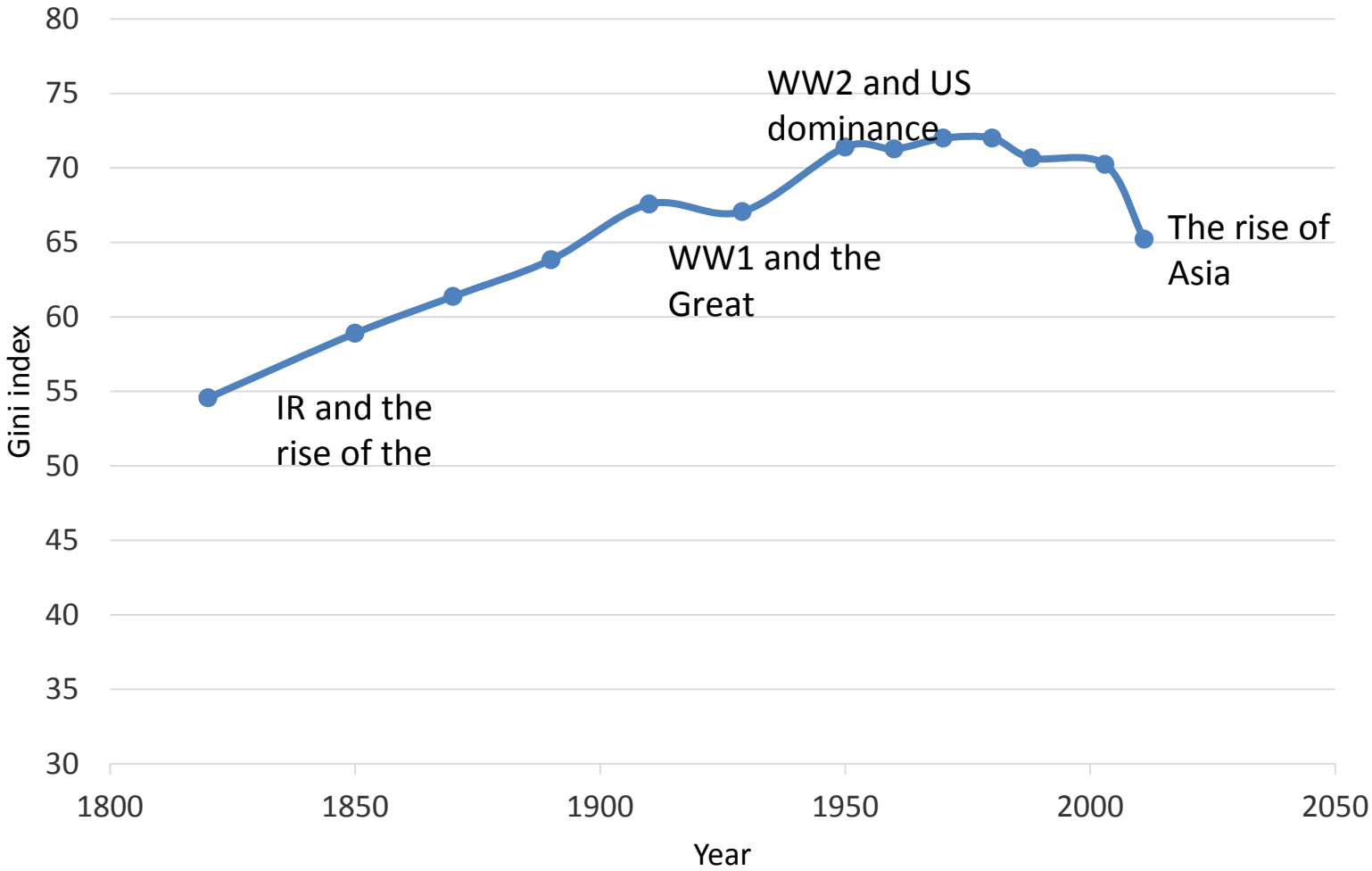


Brief structure of the talk

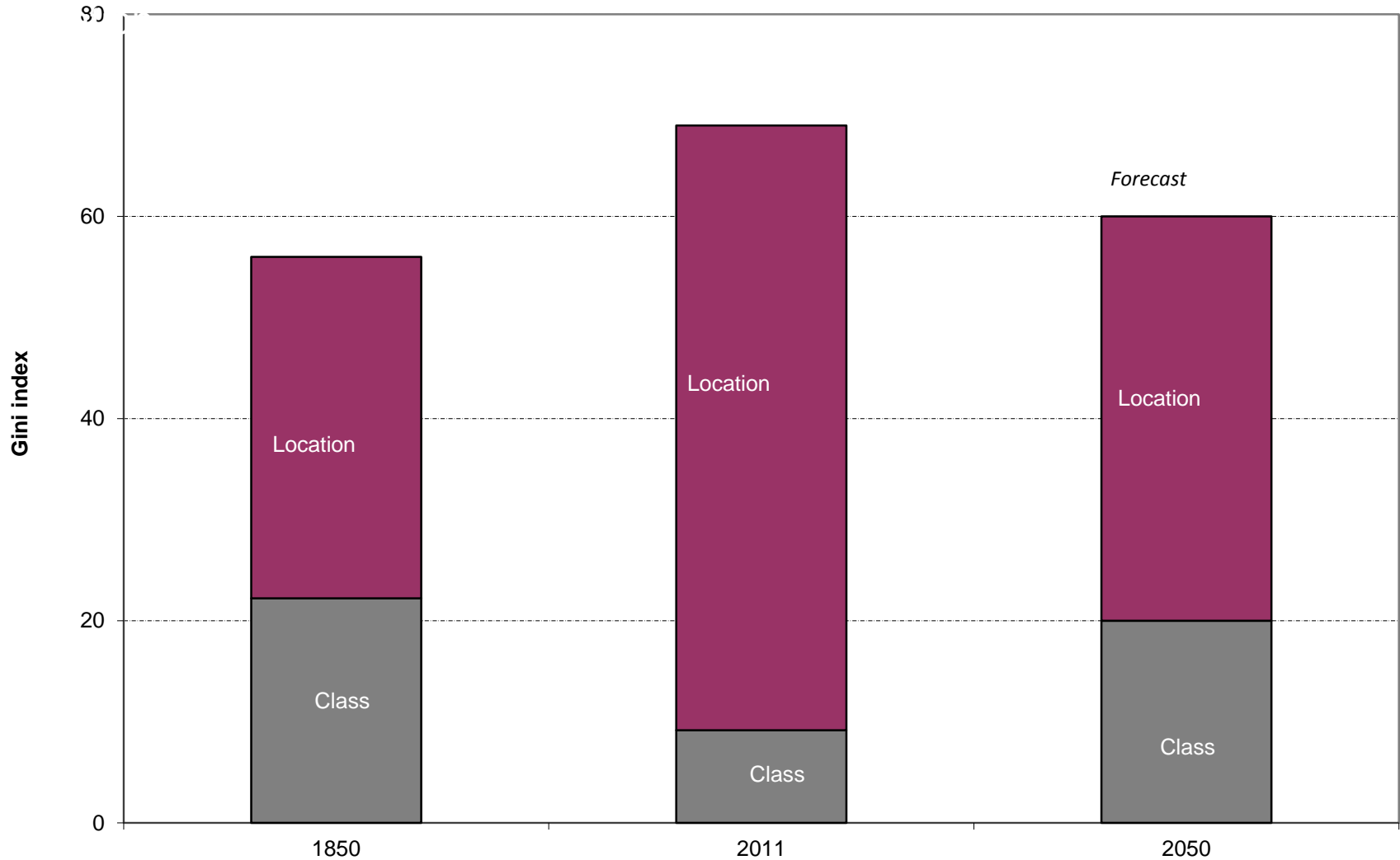
- Global inequality: in the past and now
- Technical problems of measurement
- How the world has changed between 1988 and 2013
- [Political implications of the changes]
- [Issues of justice, politics and migration]

1. Global inequality: key developments

Estimated global income inequality over the past two centuries, 1820-2013 (using 2011 PPPs)

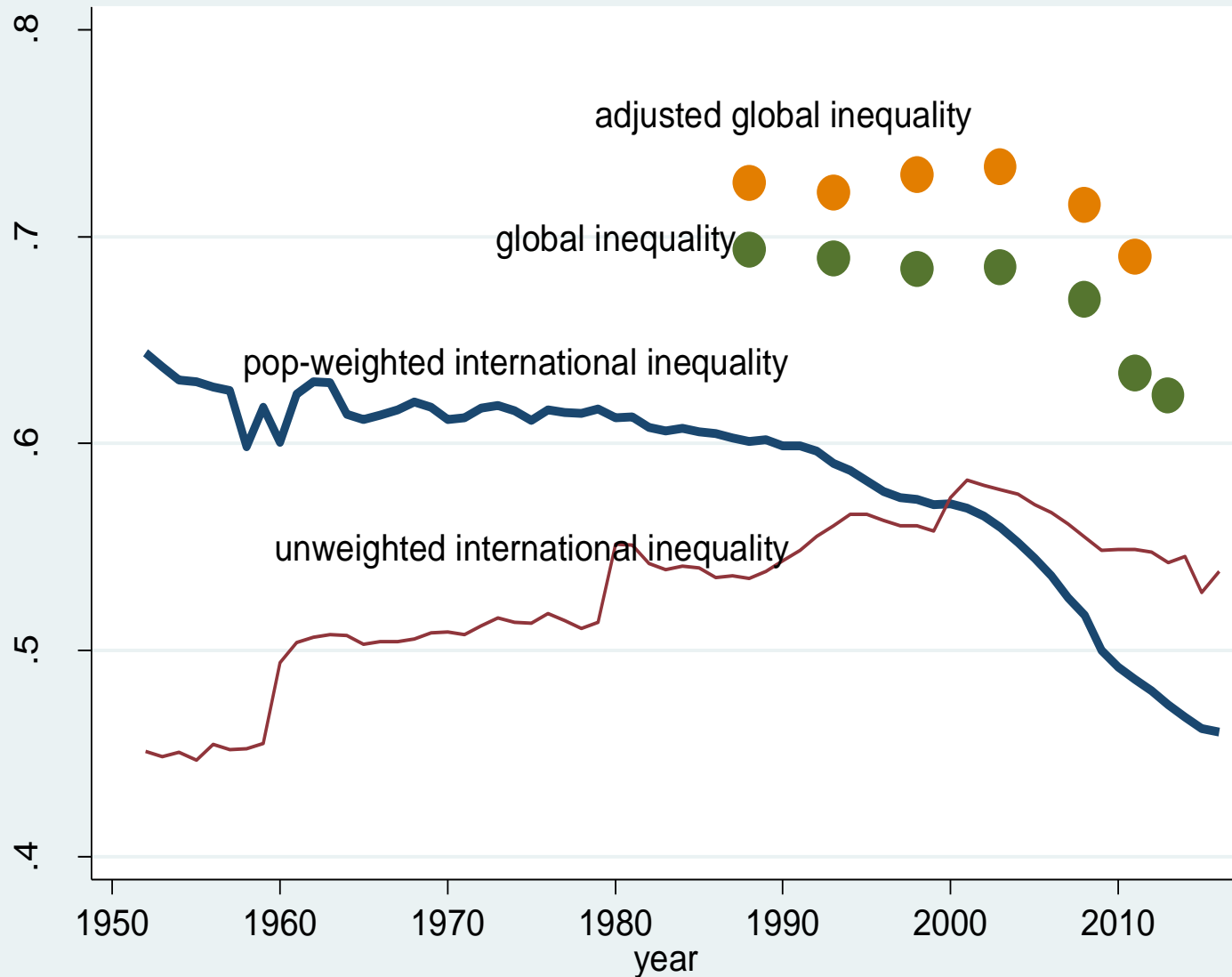


La longue durée: From Karl Marx to Frantz Fanon and back to Marx?

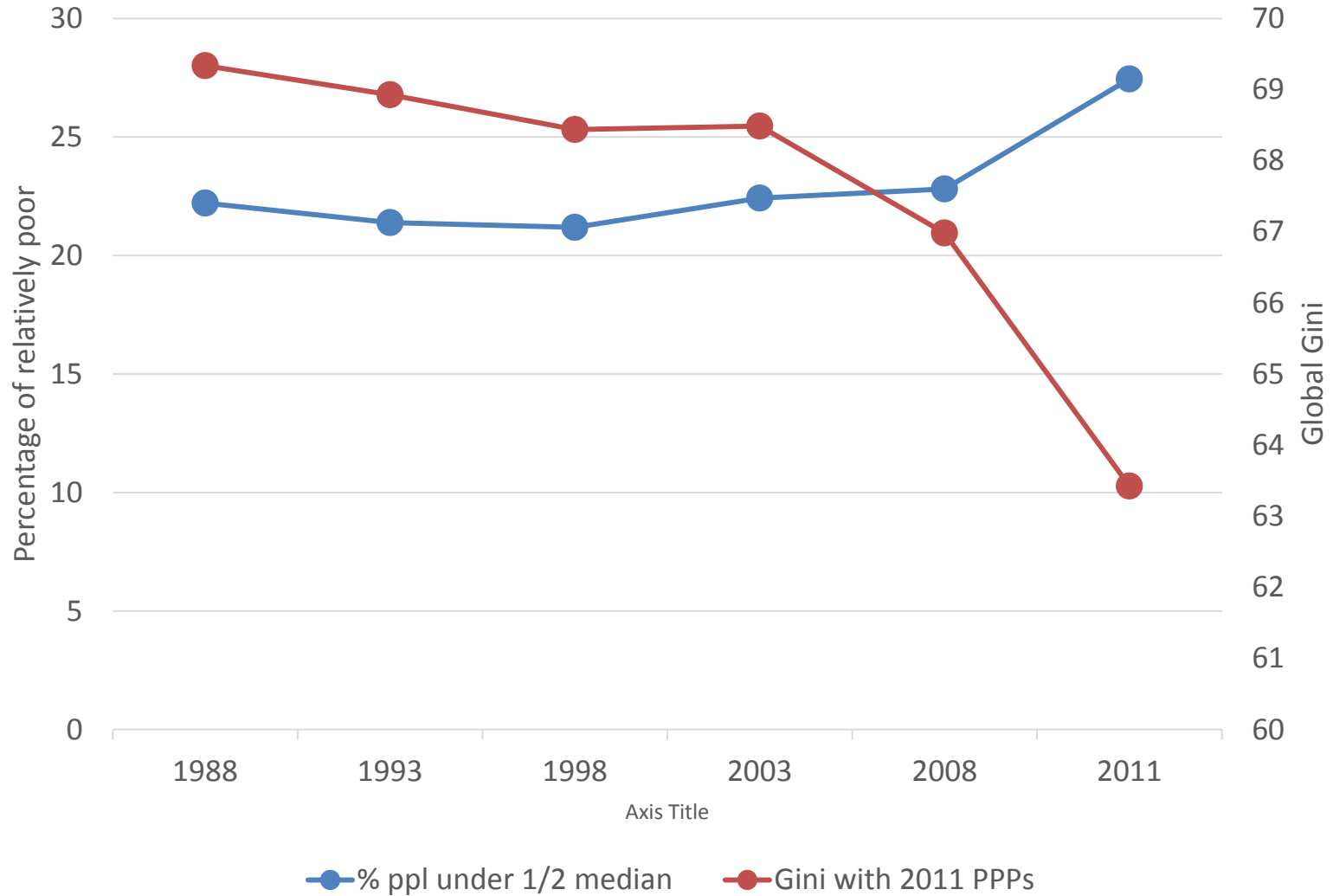


- In the *long-run* inequality is determined by the spread of the technological revolutions: the West in the 19th century, Asia today
- In the *medium-run* global inequality is determined by:
 - What happens to within-country income distributions?
 - Is there a catching up of poor countries?
 - Are mean incomes of populous & large countries (China, India) growing faster or slower than the rich world?

Three concepts of international/global inequality



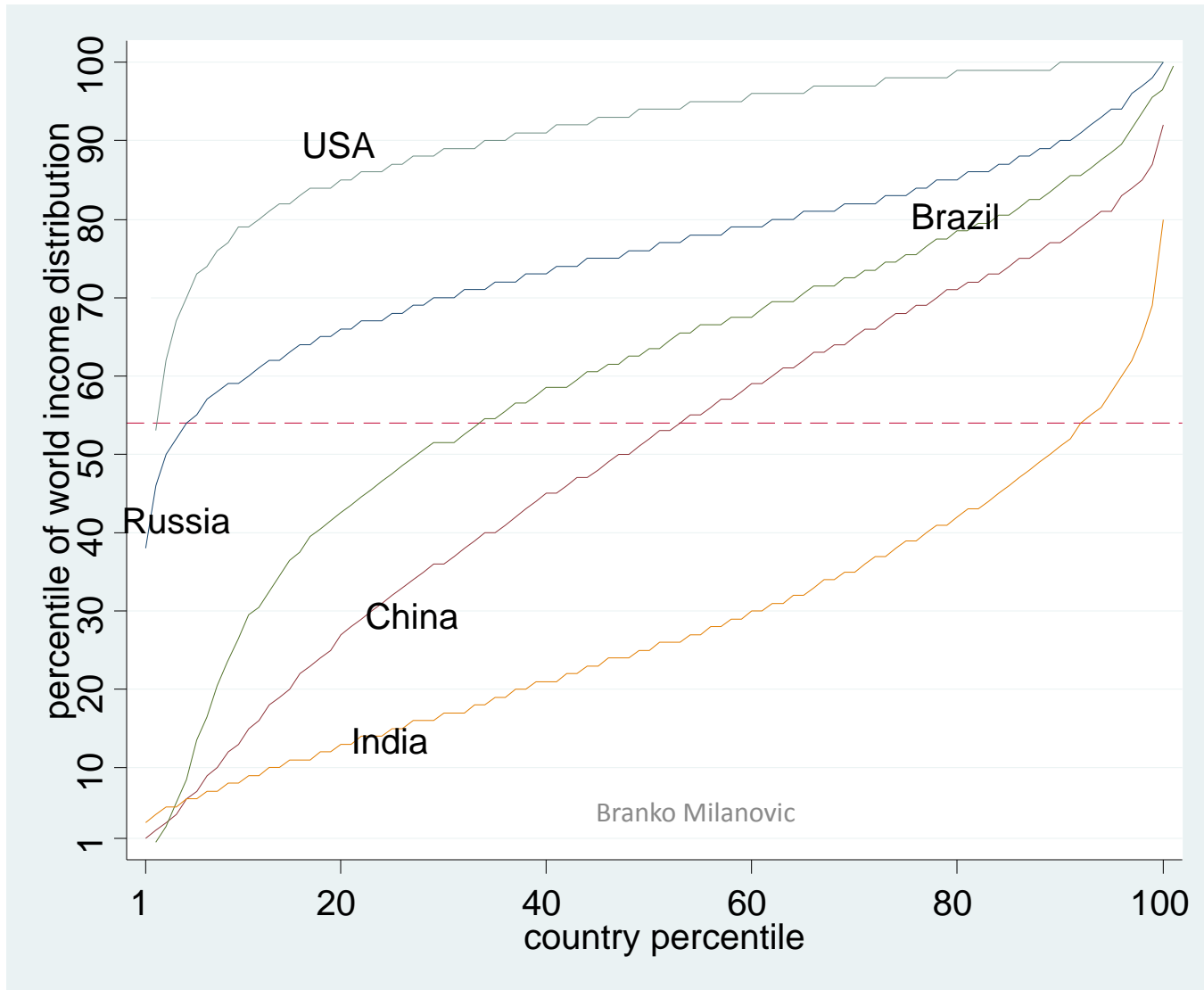
Gini and percentage of world population with income less than 1/2 global median, 1988-2011



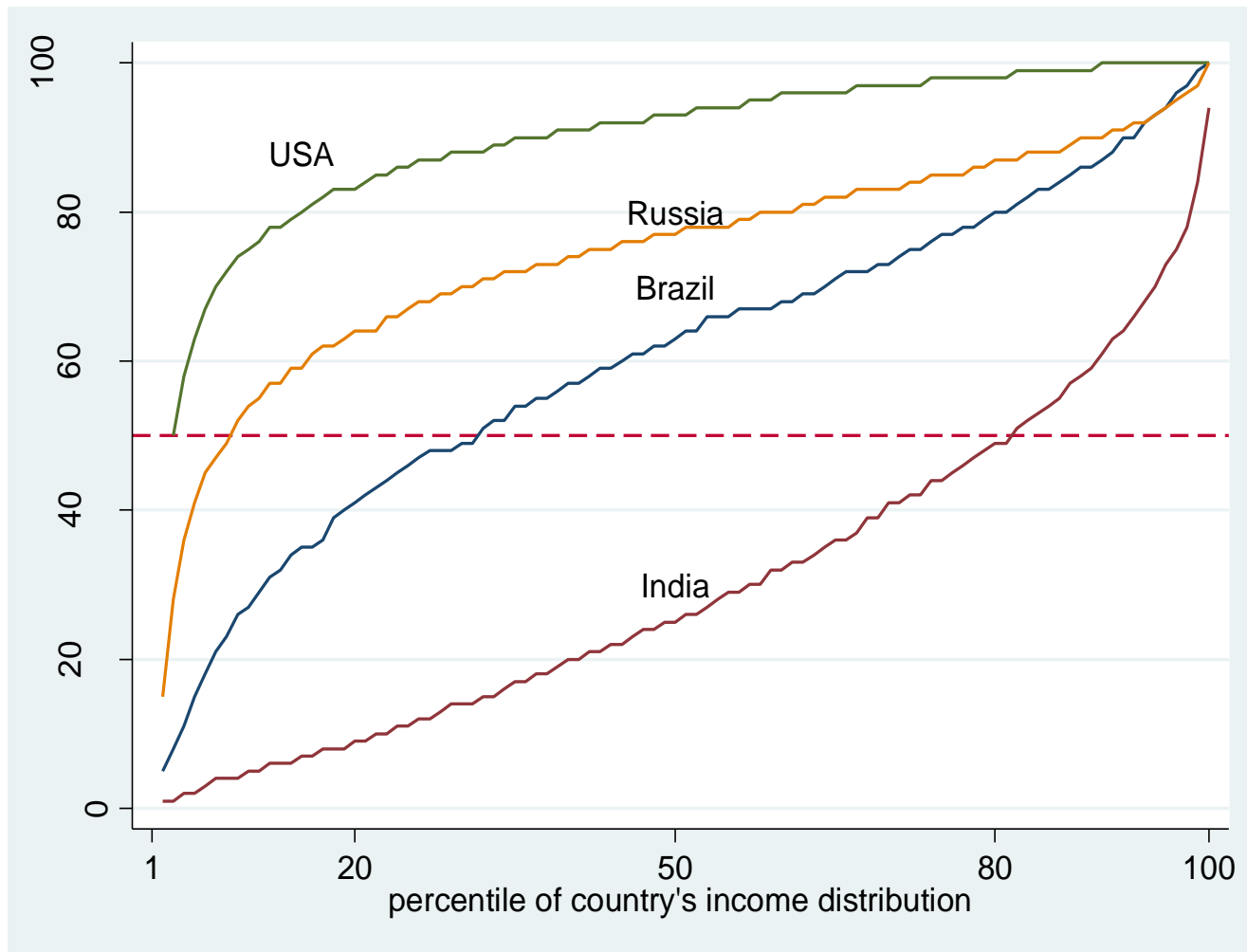
Large gaps in mean country incomes raise two important issues

- Political philosophy: is the “citizenship rent” morally acceptable? Does global equality of opportunity matter?
- Global and national politics: Migration and national welfare state
- (will address both at the end)

Different countries and income classes in global income distribution in 2008



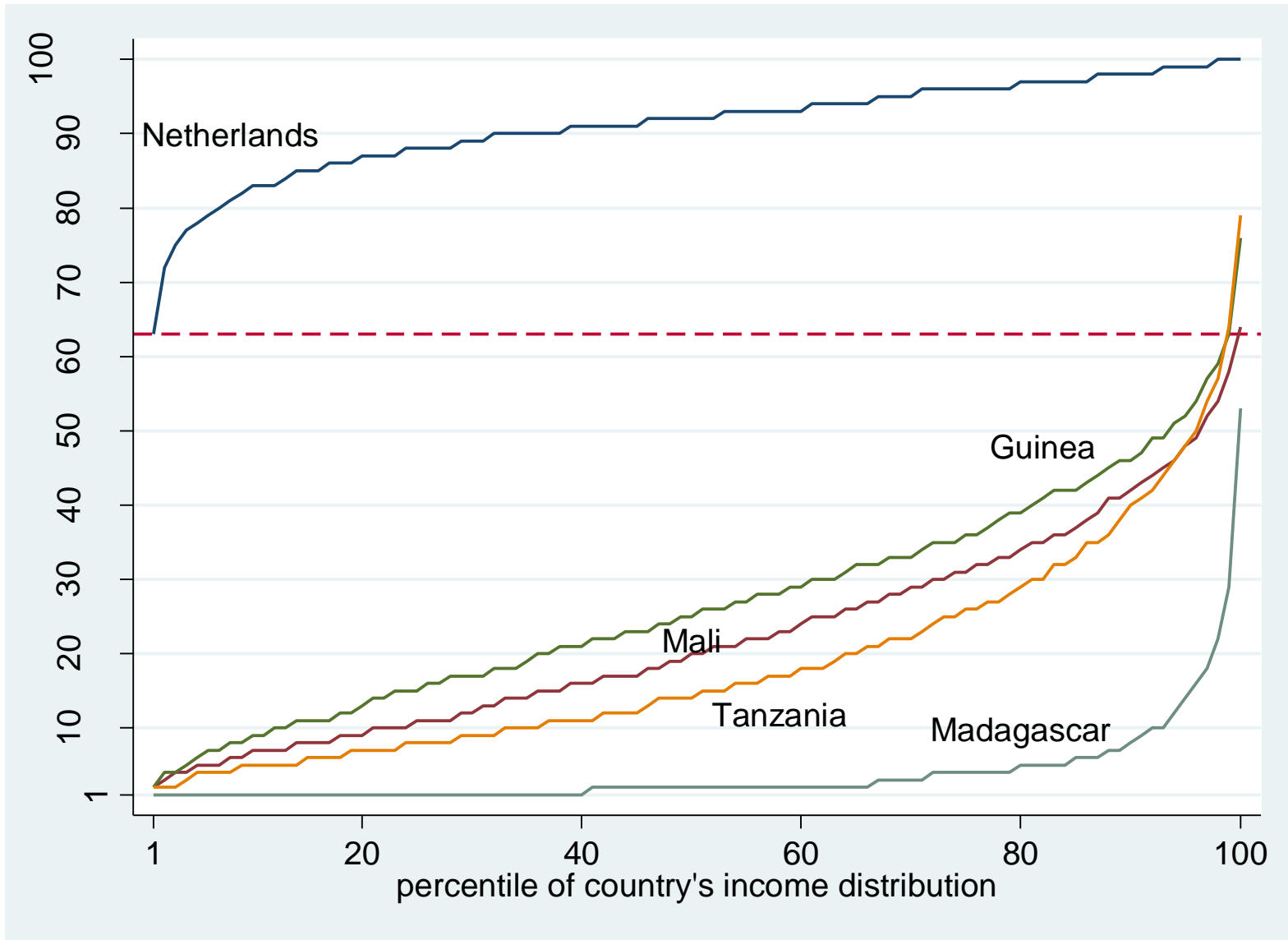
Different countries and income classes in global income distribution in 2011



India with 2011 income data

Branko Milanovic

Why international aid is unlikely to involve regressive transfers?



2. Technical issues in the measurement of global inequality

Three important technical issues in the measurement of global inequality

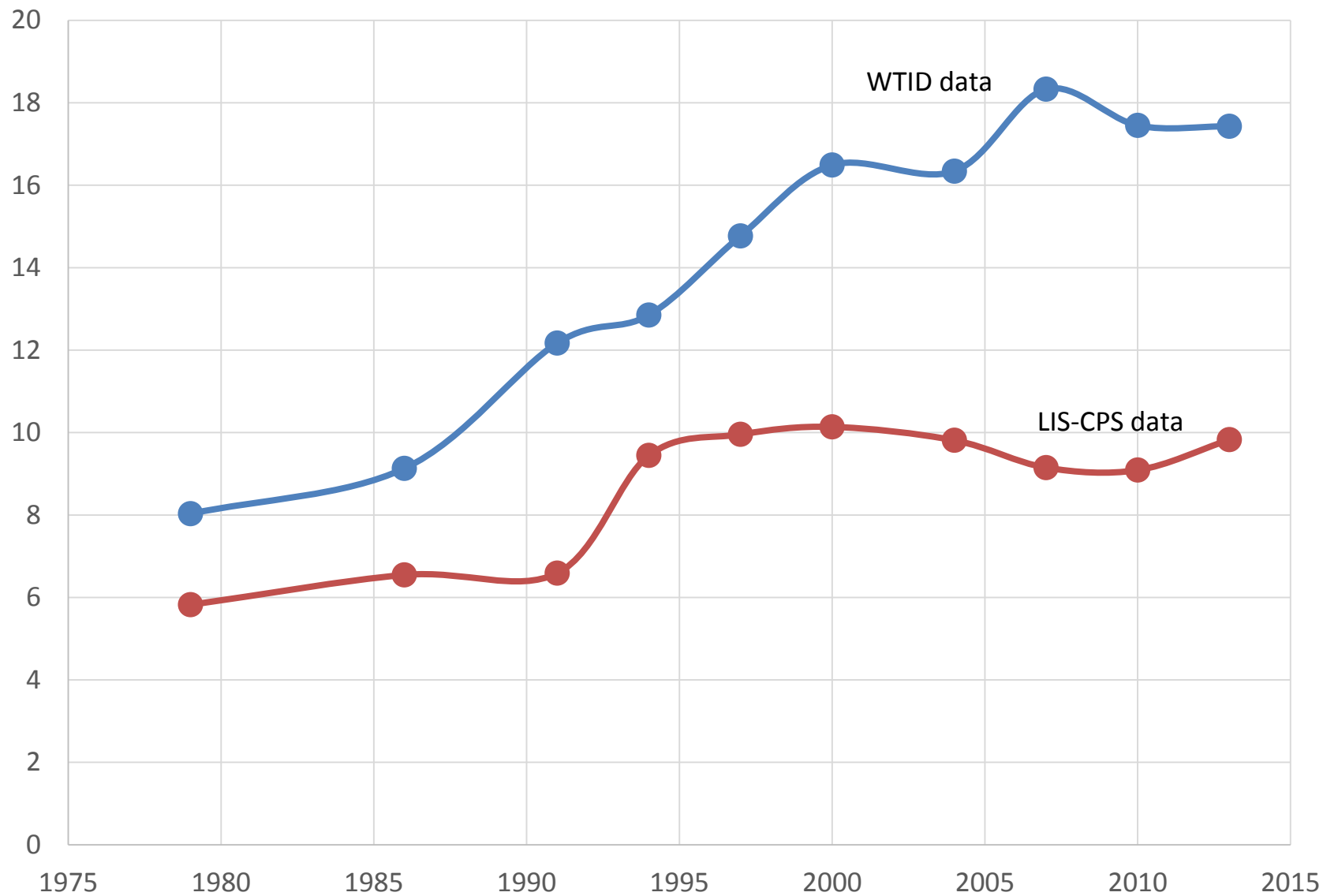
- The ever-changing PPPs in particular for populous countries like China and India
- The increasing discrepancy between GDP per capita and HS means, or more importantly consumption per capita and HS means
- Inadequate coverage of top 1% (related also to the previous point)

The issue of top underestimation

Rising NAC/HS gap and top underestimation

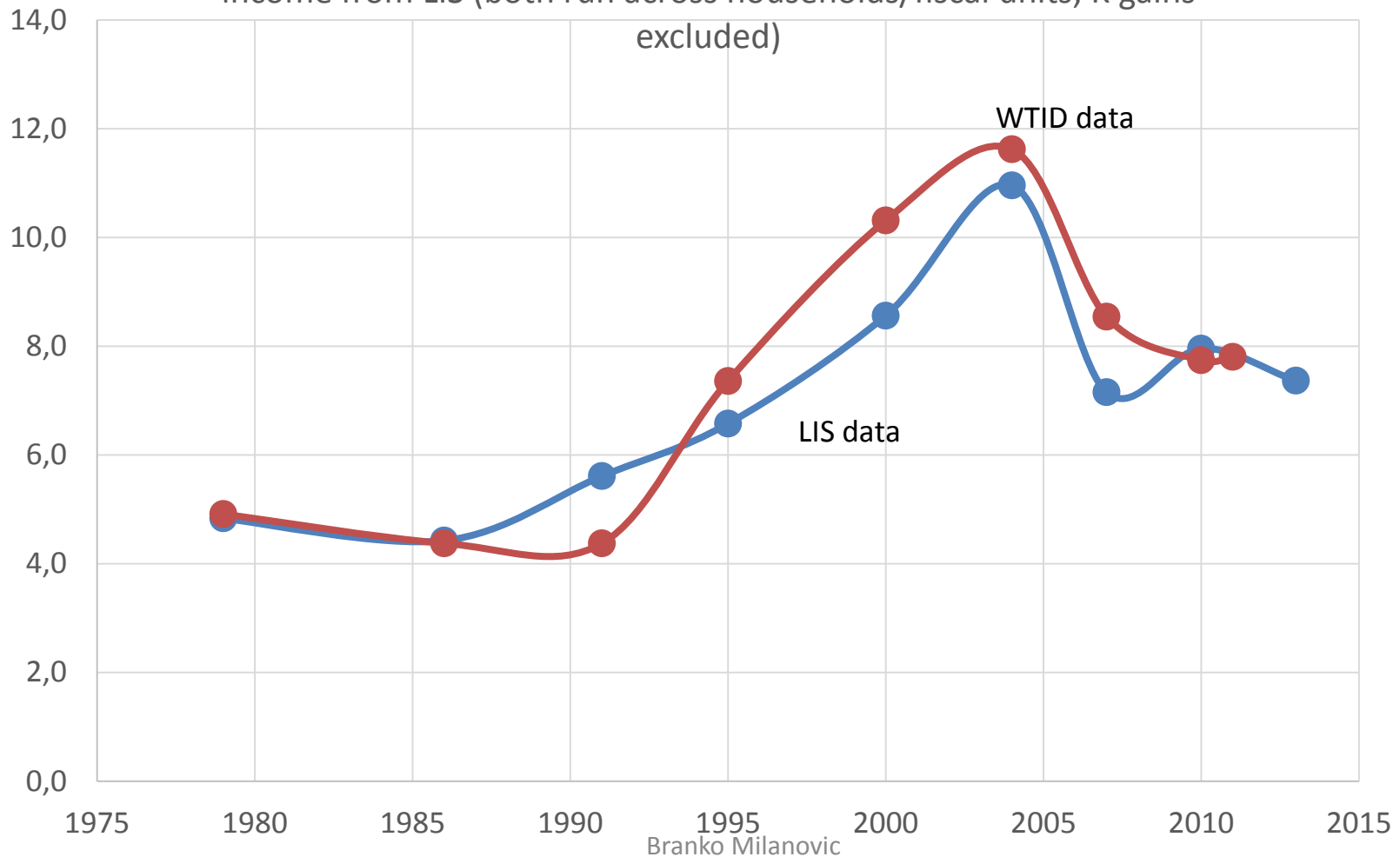
- If these two problems are really just one & the same problem.
- Assign the entire positive (NA consumption – HS mean) gap to national top deciles
- Use Pareto interpolation to “elongate” the distribution
- No *a priori* guarantee that global Gini will increase

Top 1% share in US: Comparison between WTID fiscal data and factor income from LIS (both run across households/fiscal units; K gains excluded)

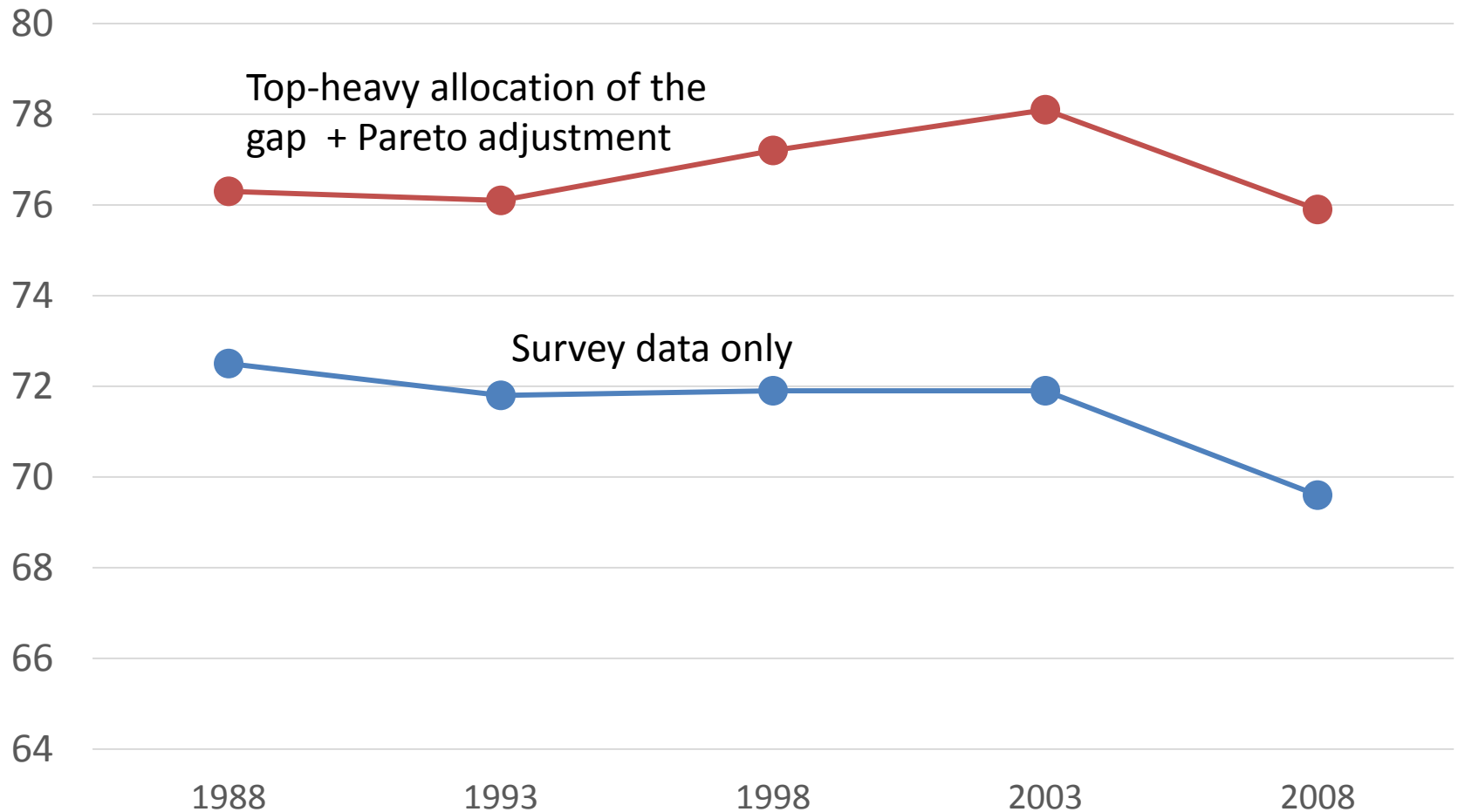


But the rising gap between fiscal and HS income is not universal

Top 1% share Norway: Comparison between WTID fiscal data and factor income from LIS (both run across households/fiscal units; K gains excluded)



With full adjustment (allocation to the top 10% + Pareto) Gini decline almost vanishes



3. How has the world changed between the fall of the Berlin Wall and the Great Recession

[based on joint work with Christoph Lakner]

Number of surveys

| | 1988 | 1993 | 1998 | 2002 | 2005 | 2008 | 2011 |
|----------|------|------|------|------|------|------|------|
| Africa | 14 | 30 | 24 | 29 | 32 | 23 | 30 |
| Asia | 19 | 26 | 28 | 26 | 23 | 27 | 22 |
| E.Europe | 27 | 22 | 27 | 25 | 27 | 27 | 24 |
| LAC | 19 | 20 | 22 | 21 | 18 | 18 | 18 |
| WENAO | 23 | 23 | 21 | 21 | 22 | 23 | 21 |
| World | 102 | 121 | 122 | 122 | 122 | 118 | 115 |

Population coverage

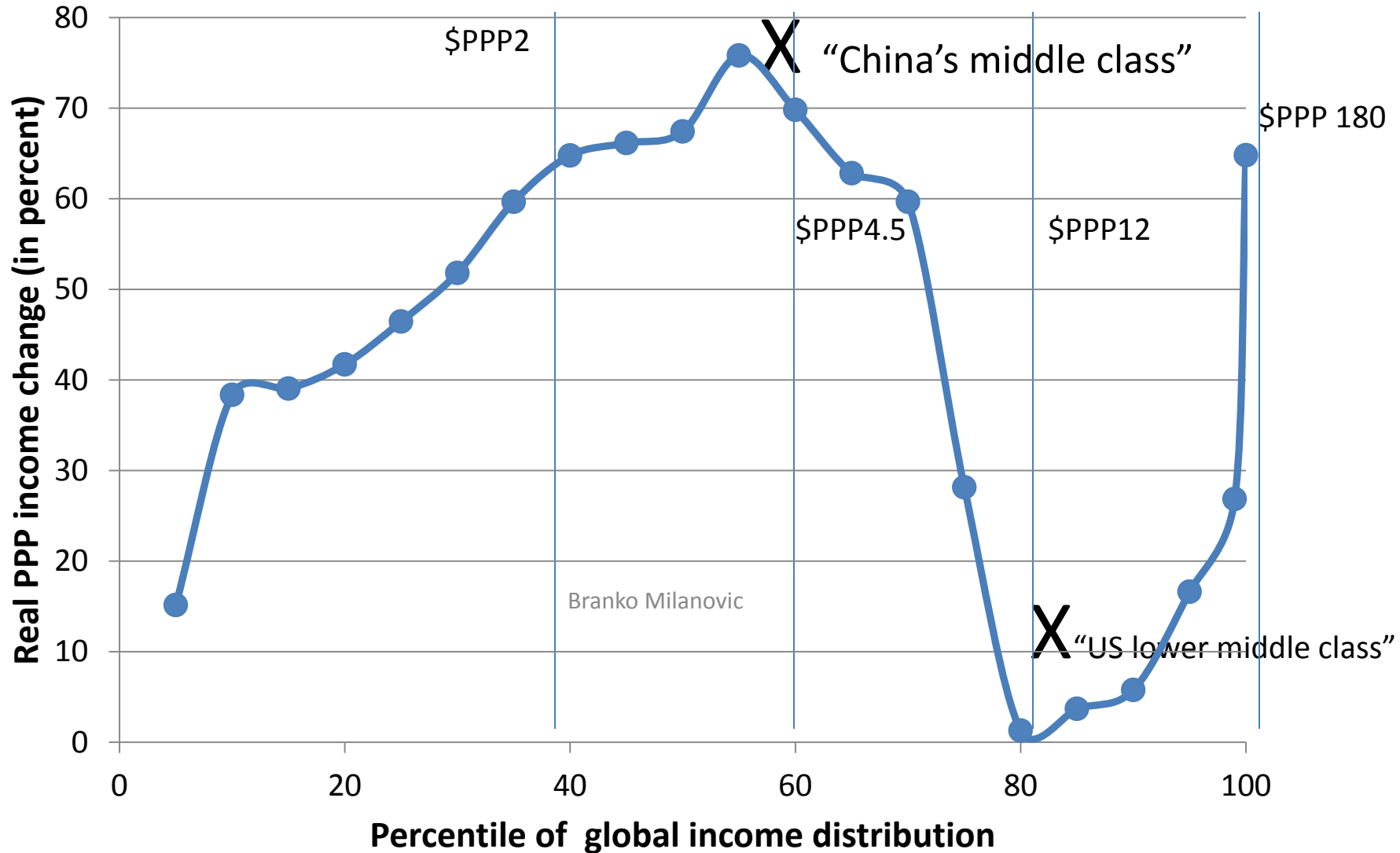
| | 1988 | 1993 | 1998 | 2002 | 2005 | 2008 | 2011 |
|----------|------|------|------|------|------|------|------|
| Africa | 48 | 76 | 67 | 77 | 78 | 78 | 70 |
| Asia | 93 | 95 | 94 | 96 | 94 | 98 | 96 |
| E.Europe | 99 | 95 | 100 | 97 | 93 | 92 | 87 |
| LAC | 87 | 92 | 93 | 96 | 96 | 97 | 97 |
| WENAO | 92 | 95 | 97 | 99 | 99 | 97 | 96 |
| World | 87 | 92 | 92 | 94 | 93 | 94 | 92 |

Non-triviality of the omitted countries

GDI (US dollar) coverage

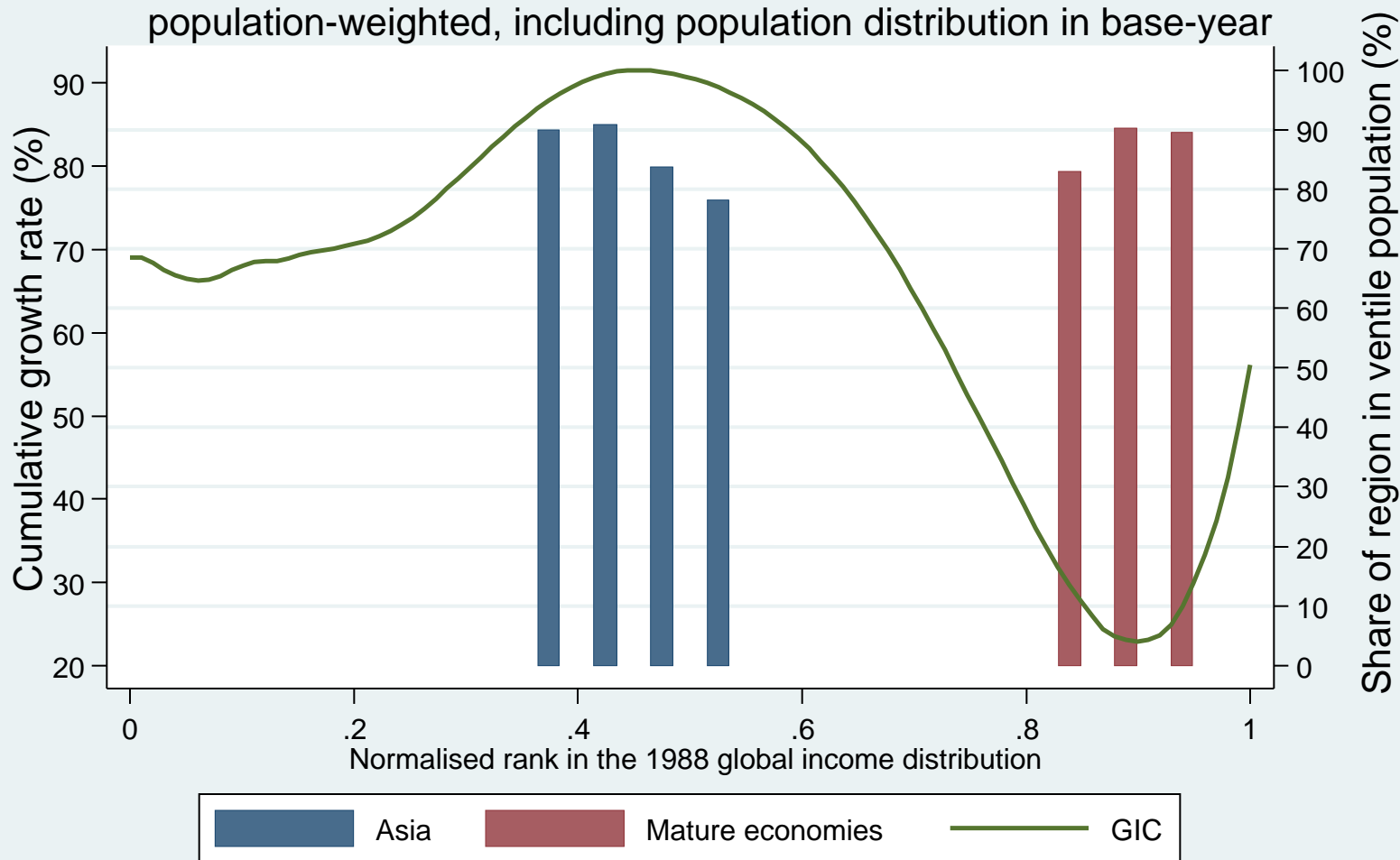
| | 1988 | 1993 | 1998 | 2002 | 2005 | 2008 | 2011 |
|-----------|------|------|------|------|------|------|------|
| Africa | 49 | 85 | 71 | 71 | 70 | 71 | 63 |
| Asia | 94 | 93 | 96 | 95 | 90 | 93 | 83 |
| E. Europe | 99 | 96 | 100 | 99 | 99 | 98 | 94 |
| LAC | 90 | 93 | 95 | 95 | 98 | 98 | 94 |
| WENAO | 99 | 96 | 96 | 100 | 100 | 97 | 95 |
| World | 96 | 95 | 96 | 98 | 97 | 95 | 90 |

Real income growth at various percentiles of global income distribution, 1988-2008 (in 2005 PPPs)



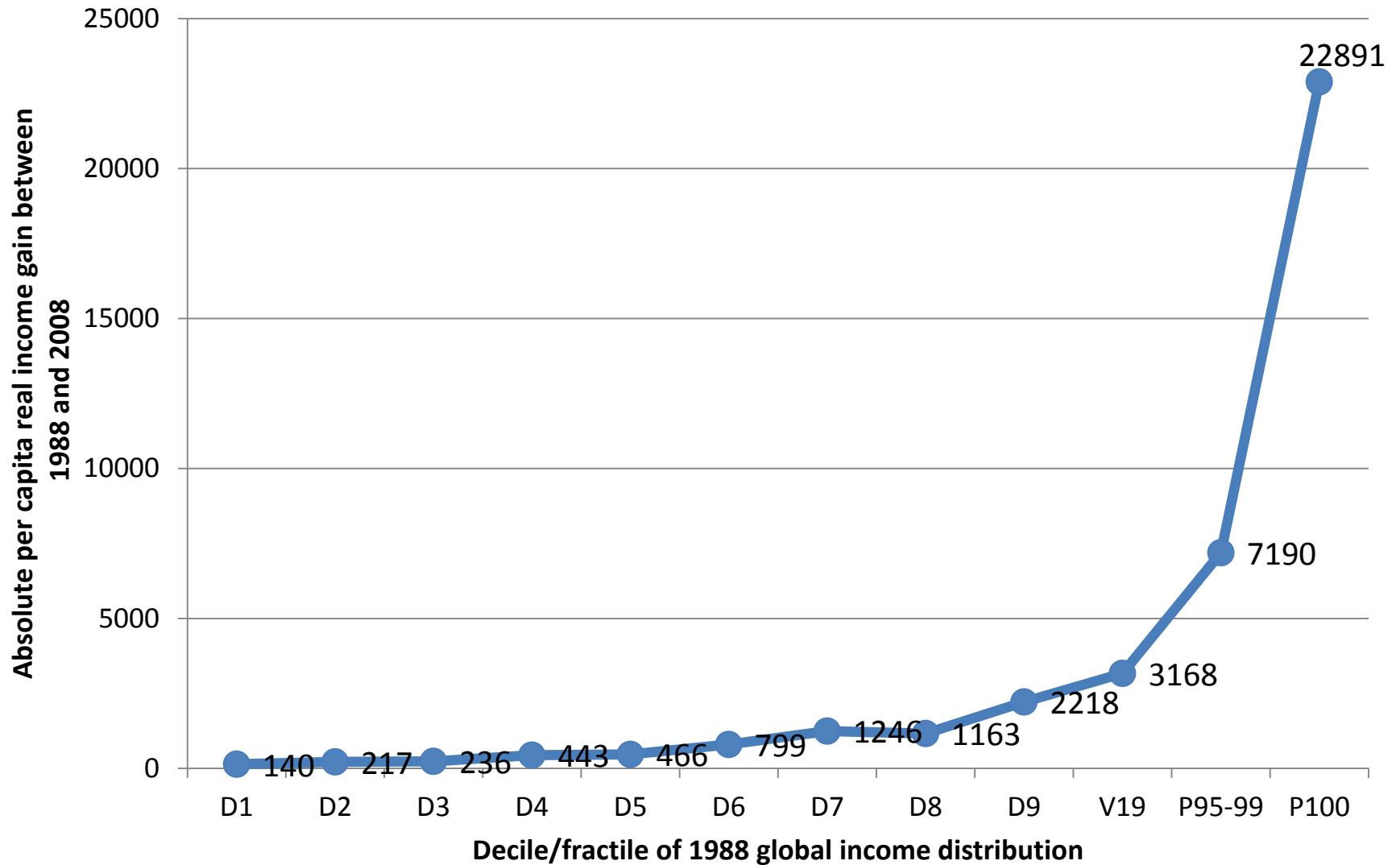
Parts of the distribution that gained the most are dominantly from Asia, parts that stagnated are mostly from mature economies

Quasi-non-anonymous growth incidence curve (1988-2008)
population-weighted, including population distribution in base-year

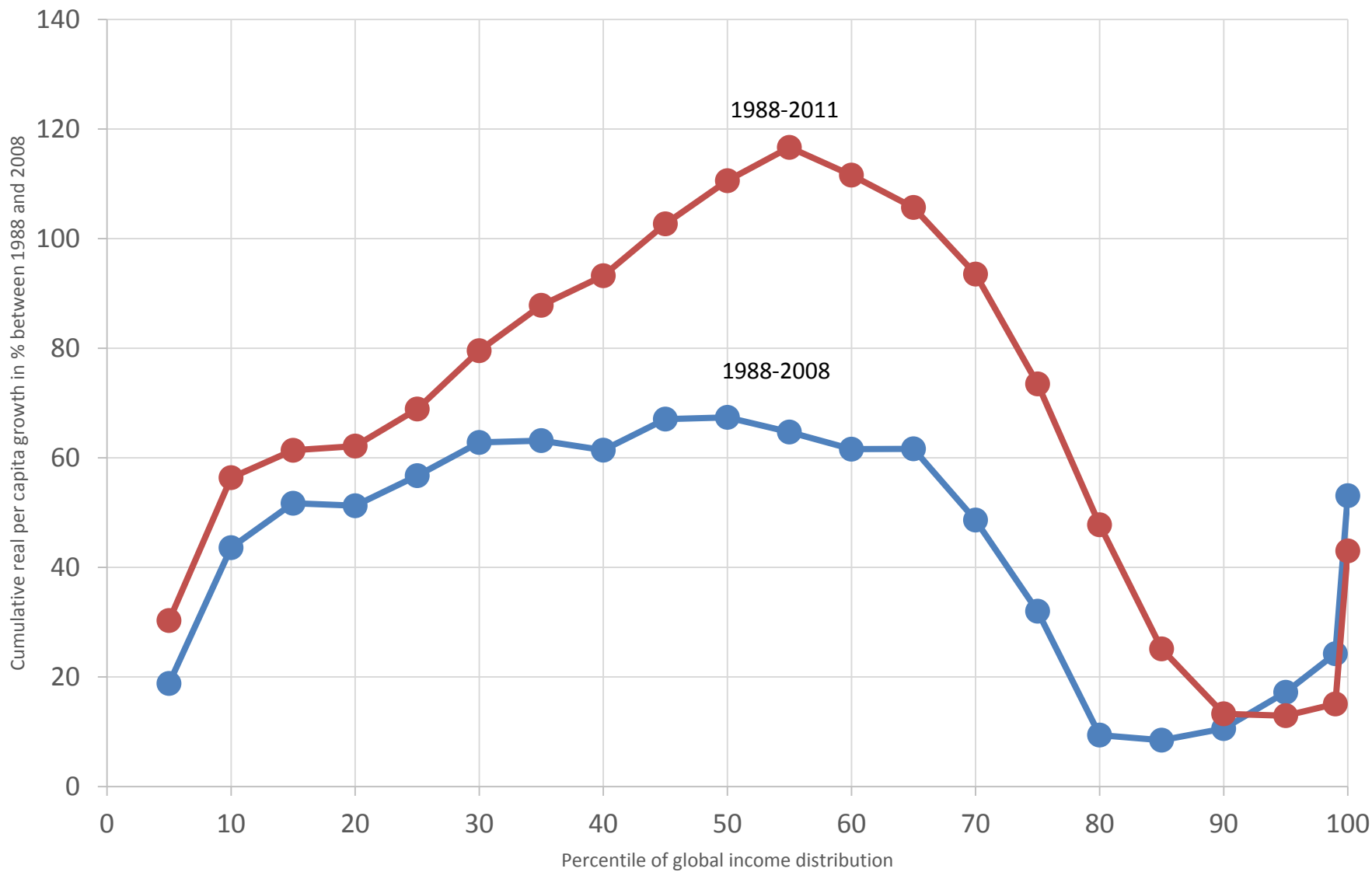


Solid line shows predicted value from kernel-weighted local polynomial regression (bw=0.05, epanechnikov, cube polynomial). Only countries observed in 1988 & 2008 (N=63) included.

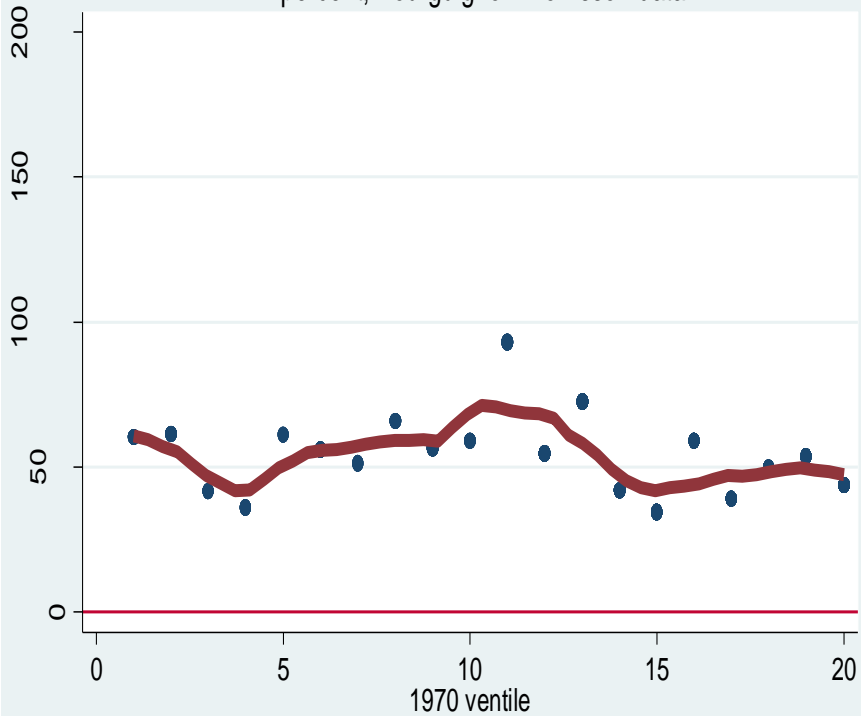
Quasi non-anonymous growth between 1988 and 2008: real absolute per capita gains at different fractiles of the **1988** distribution



Real income growth over 1988-2008 and 1988-2011 (based on 2011 PPPs)

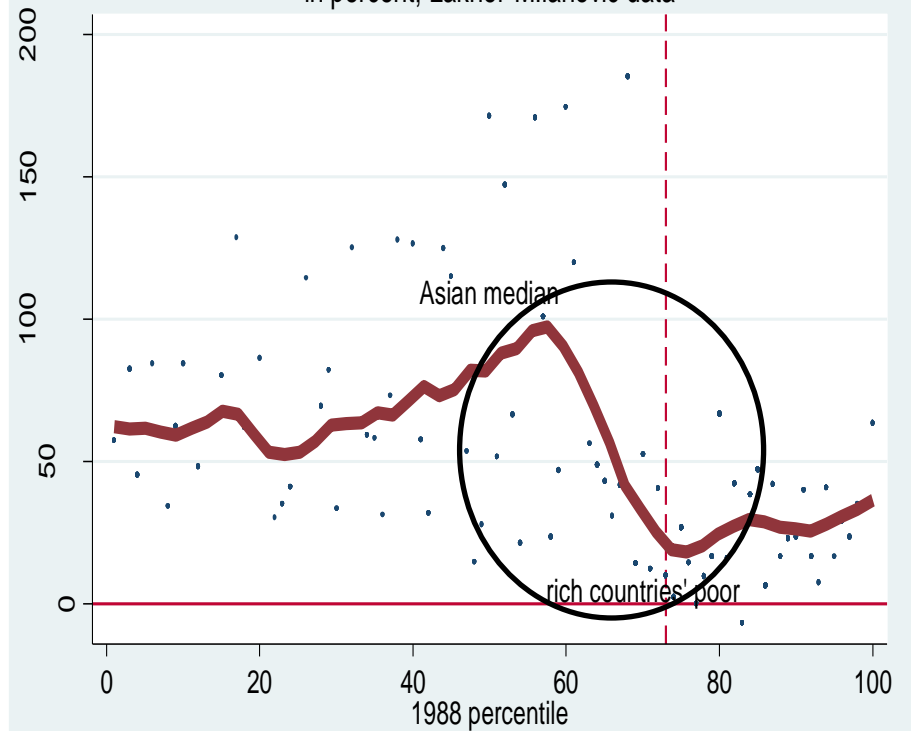


Cumulative quasi non-anonymous rate of growth 1970-1992
in percent; Bourguignon-Morrisson data



kernel = epanechnikov, degree = 0, bandwidth = .8

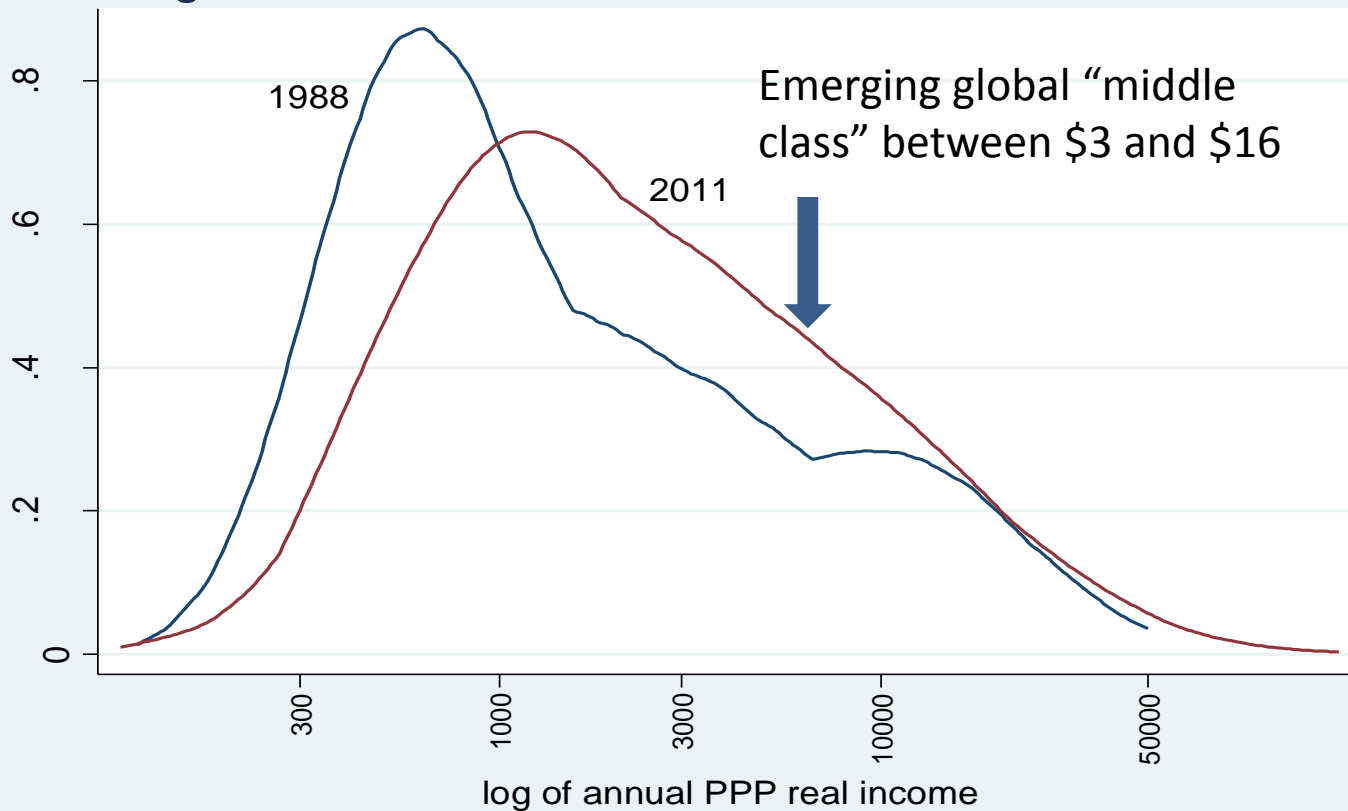
Cumulative quasi non-anonymous rate of growth 1988-2008
in percent; Lakner-Milanovic data



kernel = epanechnikov, degree = 0, bandwidth = 3

Global income distributions in 1988 and 2011

Figure 3. Global income distribution in 1988 and 2011



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twoway (kdensity loginc_11_11 [w=popu] if loginc_11_11>2 & bin_year==1988, bwidth(0.14) title("Figure 3. Global income distribution in 1988 and 2011"))
(kdensity loginc_11_11 [w=popu] if loginc_11_11>2 & bin_year==2011, bwidth(0.2)), legend(off) xtitle(log of annual PPP real income) ytitle(density) text(0.78 2.5
"1988") text(0.65 3.5 "2011") xlabel(2.477"300" 3"1000" 3.477"3000" 4"10000" 4.699"50000", lsize(small) angle(90))
Using Branko\Income_inequality\final11\combine88_08_11_new.dta

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4. Political implications

The issues

- Are growth (1) along the entire Chinese income distribution and (2) stagnation around the median in the rich world related?
- In other words, is the hump in middle related to the dip around the 70-80th percentile?
- Marching of China and India through the ranks reduces global inequality and the importance of the between-country component in global inequality
- But it might “cause” increases in within-national inequalities (thus offsetting global inequality decline)
- Can democracy survive if rich countries’ middle classes are hollowed out?

Back to Mandeville...

- Can something that is bad nationally (increased inequality) be good globally (decreased inequality)?
- Can national vices produce global virtue?

Political implications

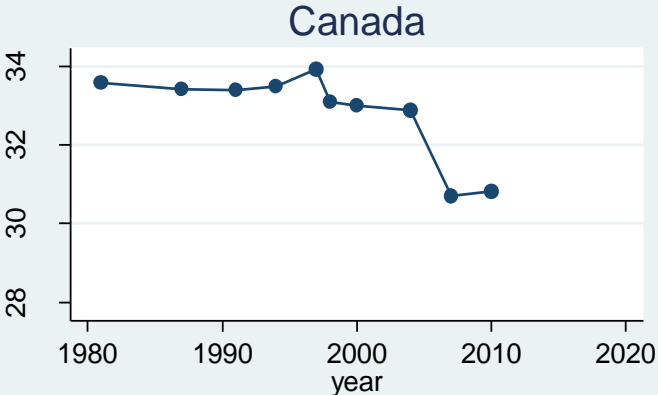
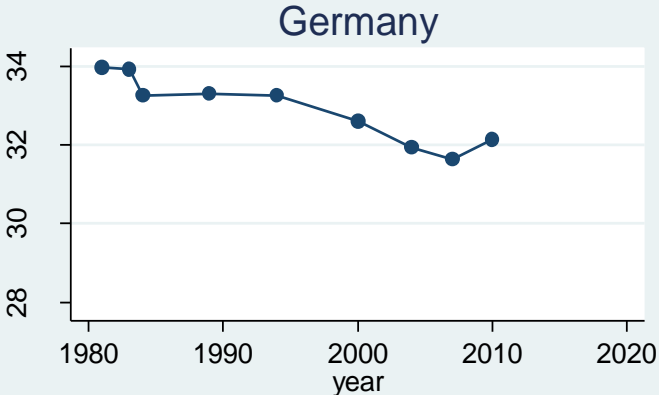
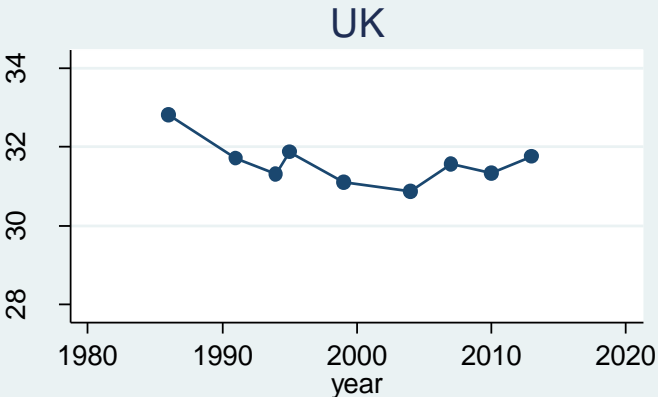
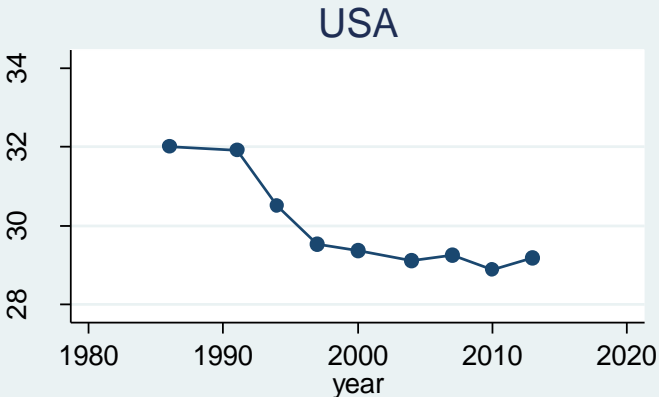
- Possible crowding out of national middle classes, and the creation of a global one
- But the middle class is presumably a force for stability when there is a political community. There is no political community at the global level. **What does global middle class mean?**
- Would global middle class create a global polity?
- Or, global plutocracy: in the longer-term, reversal to the pre World War I situation

Are we at the end of capitalism's long “el periodo especial” or going upward the second modern era Kuznets curve?

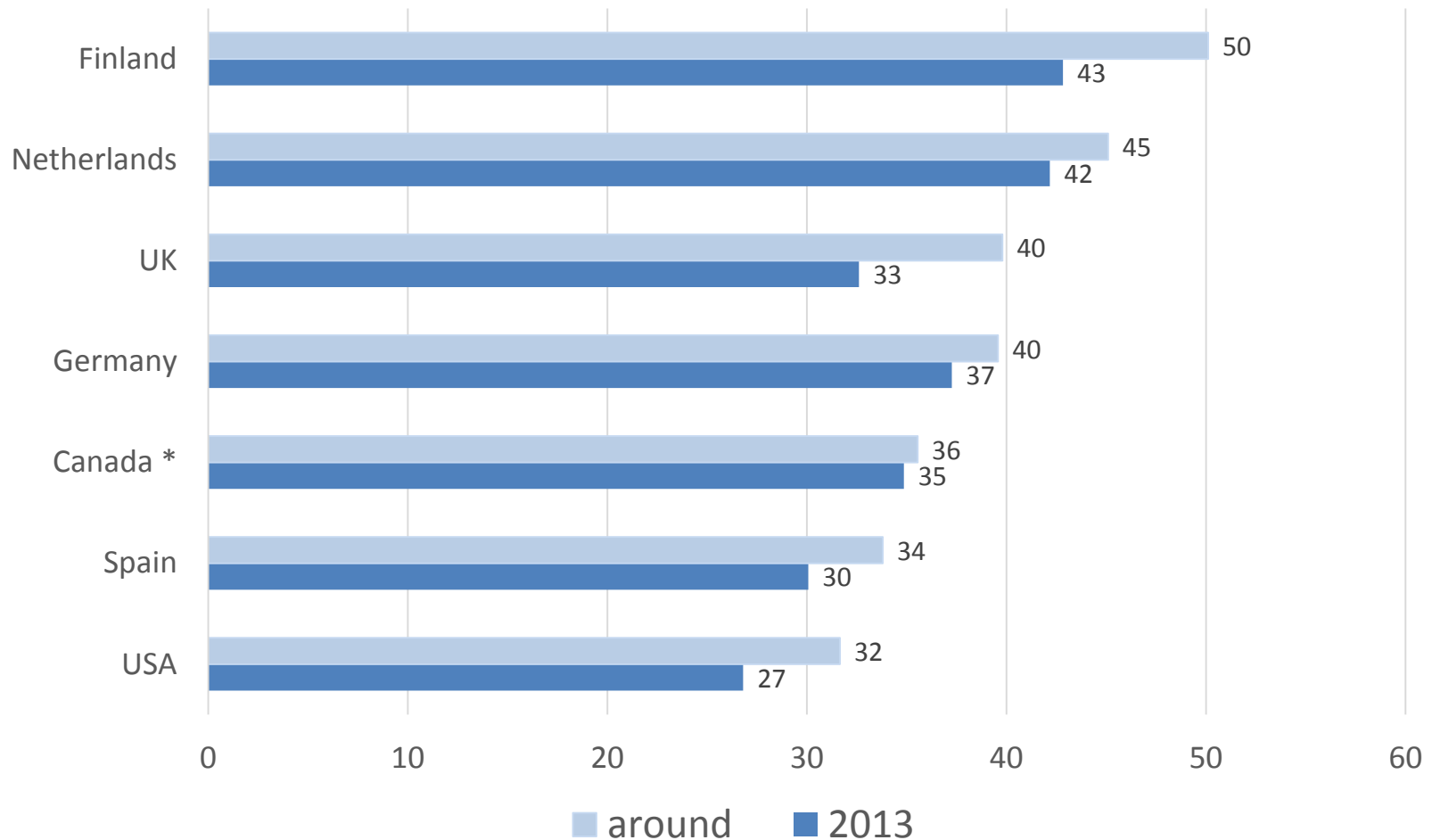
- Three challengers to global capitalism were beaten off in the 20th century: depression (by reinventing gov't), war (by marshalling resources), Communism (through Welfare State)
- Neither of these threats is any longer present; so is this the reason capitalism is becoming more unequal?
- Or is the period after 1980, the second modern era Kuznets curve driven by the technological revolution and globalization?

Focus on point B of the
“elephant graph”
(income stagnation and erosion
of the middle class in advanced
economies)

Income share of the middle four deciles 1980-2013 in percent



Percentage of population considered middle class in early 1980s and 2013



The middle class defined as population with income between +/-25% of national median income (all in per capita basis; disposable income; LIS data)

5. Issues of justice and politics

1. Citizenship rent

2. Migration and national welfare state

3. Hollowing out of the rich countries' middle classes

Global inequality of opportunity

- Regressing (log) average incomes of 118 countries' percentiles (11,800 data points) against country dummies “explains” 77% of variability of income percentiles
- Where you live is the most important determinant of your income; for 97% of people in the world: birth=citizenship.
- Citizenship rent.

Is citizenship a rent?

- If most of our income is determined by citizenship, then there is little equality of opportunity *globally* and citizenship is a rent (unrelated to individual desert, effort)
- ***Key issue:*** *Is global equality of opportunity something that we ought to be concerned or not?*
- Does national self-determination dispenses with the need to worry about GEO?

The logic of the argument

- Citizenship is a morally-arbitrary circumstance, independent of individual effort
- It can be regarded as a rent (shared by all members of a community)
- Are citizenship rents globally acceptable or not?
- Political philosophy arguments *pro* (social contract; statist theory; self-determination) and *contra* (cosmopolitan approach)

Rawls' views on inter-generational transmission of wealth

| Group | Inter-generational transmission of collectively acquired wealth | Argument | Policy |
|--------|---|--|---------------------------------------|
| Family | Not acceptable Or at least to be limited | Threatens equality of citizens | Moderate to very high inheritance tax |
| Nation | Acceptable | Affirms national self-determination (moral hazard) | International aid |

The Rawlsian world

- For Rawls, global optimum distribution of income is simply a sum of national optimal income distributions
- Why Rawlsian world will remain unequal?

Global inequality in Real World, Rawlsian World, Convergence World...and Shangri-La World (Theil 0; year 2011)

| Mean country incomes Individual incomes within country | All equal | Different (as now) |
|---|---|---|
| All equal | 0 | 54 (all country Theils=0; all mean incomes as now) |
| Different (as now) | 23 (all mean incomes equalized; all country Ginis as now) | 77 |

Conclusion

- Working on equalization of within-national inequalities will not be sufficient to significantly reduce global inequality
- Faster growth of poorer countries is key and also...

Migration....

Migration: a different way to reduce global inequality and citizenship rent

- How to view development: Development is increased income for poor people regardless of where they live, in their countries of birth or elsewhere
- Migration and LDC growth thus become two equivalent instruments for development

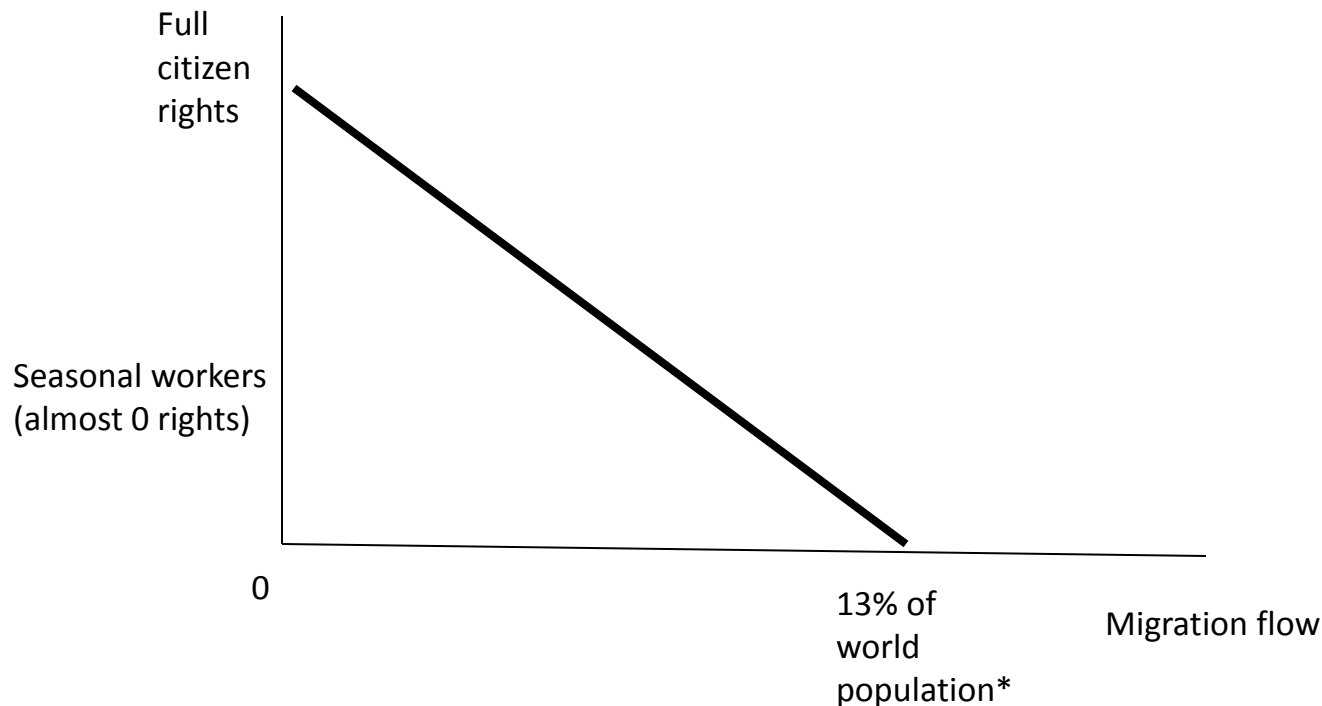
Growing inter-country income differences and migration: Key seven borders today



The logic of the migration argument

- Population in rich countries enjoys the citizenship premium
- They are unwilling to share, and thus possibly reduce (at least “locally”) this premium with migrants
- Currently, the premium is full or 0 because citizenship is (in terms of rights as well as financially) a binary variable
- Introduce various levels of citizenship (tax discrimination of migrants; obligation to return; no family etc.) to reduce the premium
- Temporary work
- Doing this should make native population more acceptant of migrants

Trade-off between citizenship rights and extent of migration



* People who would like to migrate according to a world-wide Gallup poll

Political issue: Global vs. national level

- Our income and employment is increasingly determined by global forces
- But political decision-making still takes place at the level of the nation-state
- If stagnation of income of rich countries' middle classes continues, will they continue to support globalization?
- Two dangers: populism and plutocracy
- To avert both, need for within-national redistributions and asset equalization: those who lose have to be helped =>

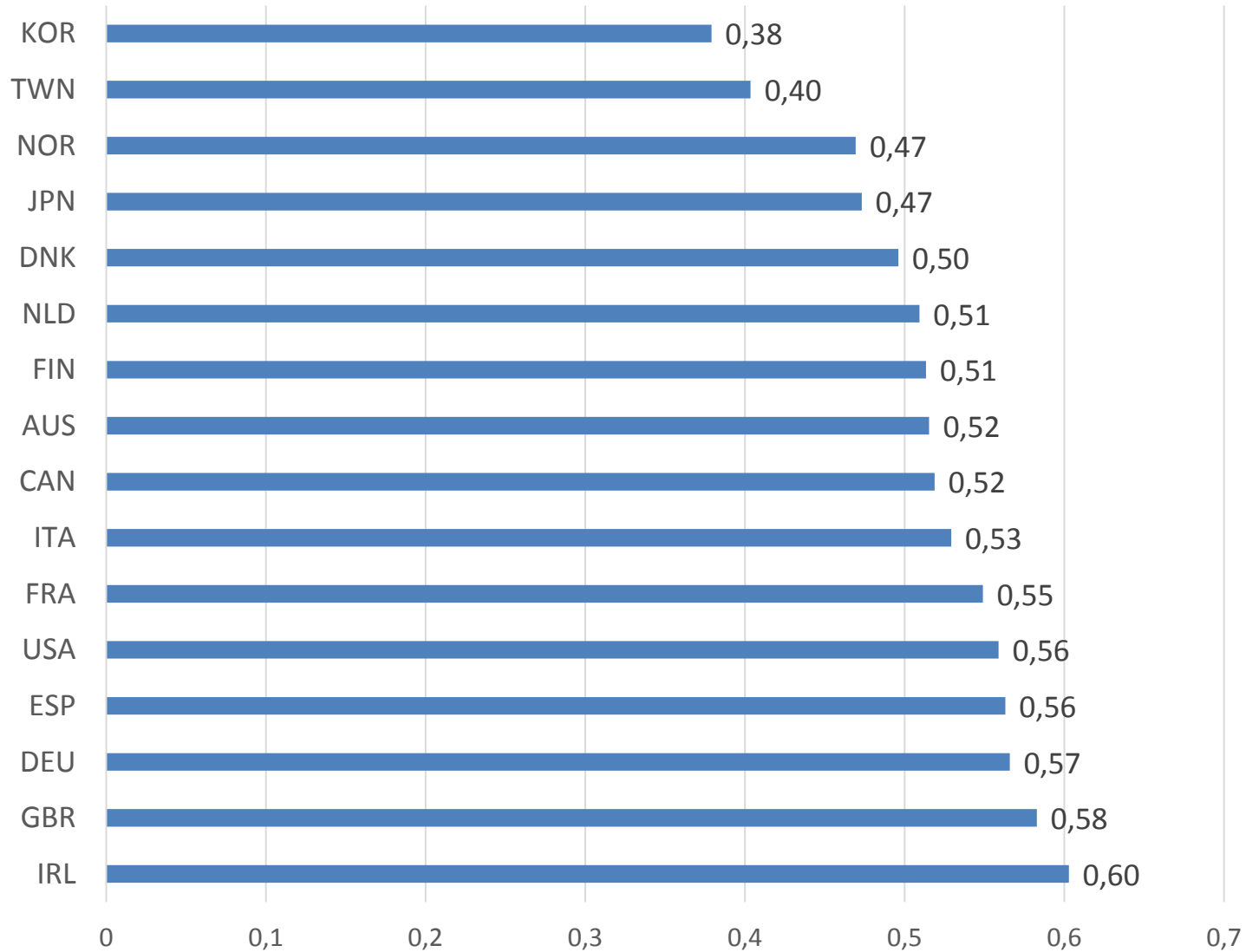
Why tools from the 20th century will not work?

- Education in quantitative sense will have much less of a “bang for a buck” and will not by itself reduce the skill premium
- Trade unions are on the decline because the nature of work, in service-oriented and globalized economy has changes
- Increases in taxation of current income are unlikely because the trust in the government is less
- New transfers cannot be financed; aging of the population and anti-migrant feelings further limit what can be done
- And one unlikely danger: more meritocratic capitalism where top wage earners are also top K earners (and the reverse)

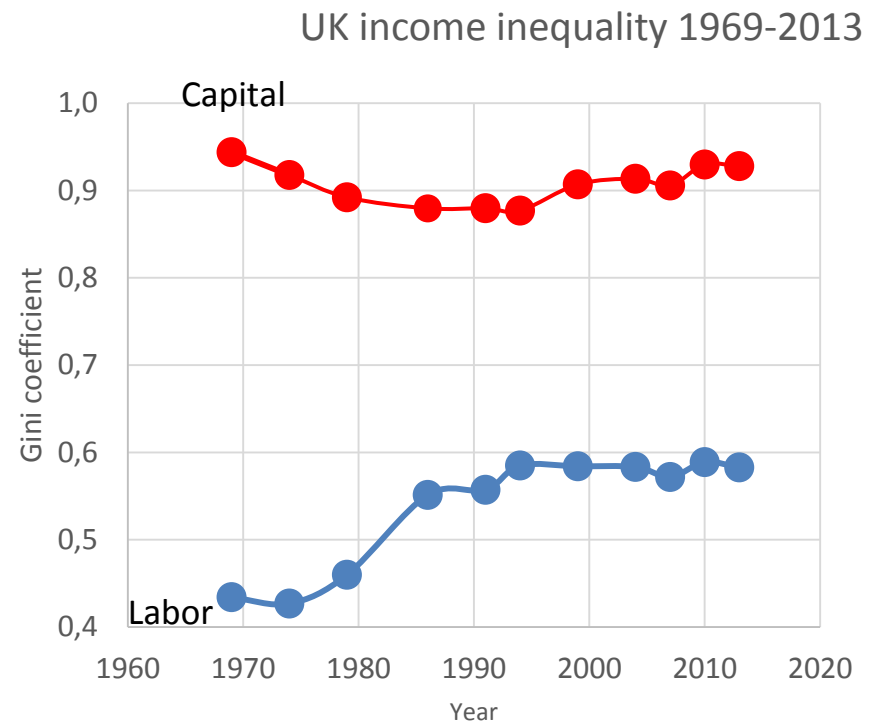
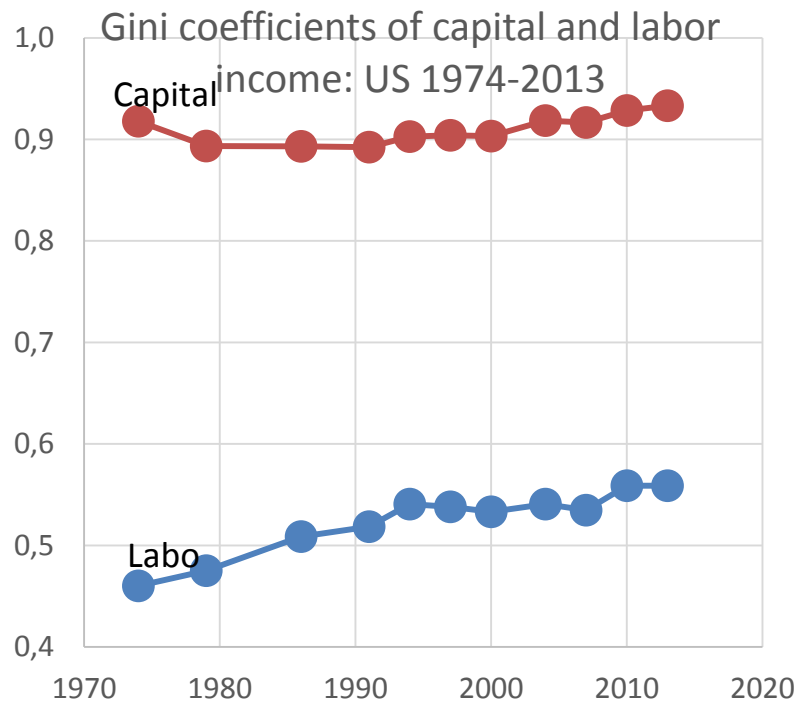
What could possibly be done?

- Improved quality of education and [much easier access to education](#) for all—that is, investing for stronger public education rather than the opposite trend of ever stronger private education
- [Deconcentration of ownership and income from capital](#) through the use of tax incentives; a long and arduous process
- Employee-stock ownership plans
- Higher taxation of inheritance (not current income)
- Change in the rules re. financing of political campaigns (especially in the United States)

Gini of household per capita labor income around 2013



Ginis of K and L income in the US and the UK



Final conclusion

- To reduce global inequality: fast growth of poor countries + migration
- To have migration, discriminate the migrants
- To preserve good aspects of globalization: reduced inequality within rich countries via equalization of human and financial assets (i.e. focus on pre-redistribution)